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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,934	07/03/2003	Sadao Kanbe	45360	3959

1609 7590 10/12/2006

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.
1300 19TH STREET, N.W.
SUITE 600
WASHINGTON,, DC 20036

EXAMINER	
RAZA, SAIRA B	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/611,934	KANBE ET AL.	
	Examiner	Art Unit	
	Saira Raza	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *7/14/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) *4-8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/22/03 & 7/3/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1-3 in the reply filed on 7/14/2006 is acknowledged. The traversal is on the ground(s) that the process of claim 4 cannot be used to make a materially different product as in claim 1. This is not found persuasive because the product of claim 1 can be formed by another and materially different process, such as interfacial precipitation, spray drying, in situ polymerization, or emulsion; hence, the product is not required to be formed via the process of claim 4. As previously stated, the process can be employed to form a product different than that of claim 1, for example a product wherein a drying step is required. Additionally, it is noted that the process limitations of claim 1 are recognized as product-by-process limitations, wherein even though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

2. The information disclosure statement filed 7/3/2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

3. Alternatively, the information disclosure statement filed 7/3/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or

that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Product-by-Process Claims

4. Claims 1-3 are recognized as product-by-process claims, wherein even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Wherein the claimed product appears to be the same or similar to that of the prior art, although produced by a different process. The examiner has provided a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Albert et al. (US 6017584).

7. Albert discloses encapsulated electrophoretic displays and materials useful in fabricating such displays. Specifically, Albert discloses the formation of a composition comprising microcapsules and an aqueous binder. Electrophoretic particles dispersed within a suspending, or electrophoretic, fluid are encapsulated in the shell of the microcapsules (Abstract, Example 1, D, 2). Albert discloses a variety of suitable electrophoretic particles, such as titania (col. 12, line 54 to col. 15, line 60). Albert discloses a variety of suitable suspending fluids, such as organic solvents, specifically aromatic hydrocarbons, such as, toluene (col. 16, line 39). Albert discloses a variety of suitable microcapsule shell materials which encapsulate the particles and the suspending fluid (col. 19, lines 31 to col. 21, line 21). Albert discloses that a variety of additional aqueous binders can be added to the microcapsule composition in order to make the composition suitable for coating (col. 22, lines 14 to col. 23, lines 29). Albert exemplifies that the microcapsule content in the microcapsule composition is 71.4 wt %, hence meeting the claimed limitation. In reference to claim 3, Albert exemplifies that the microcapsule composition is comprised solely of the microcapsules and the aqueous binder, hence the total content is considered 100 wt% (Example 1, D, 2).

8. In reference to the product-by-process limitations, it is the examiner's position that the product of Albert appears to be the same or similar to that claimed, although produced by a different process. Specifically, since the electrophoretic particles, suspending fluid and aqueous binder of Albert correspond to those claimed and provided in the specification, it is clear that the resulting microcapsule composition of Albert is the same or similar to that claimed.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al. (US 6017584).

11. The Albert et al. reference applies as above, and discloses that the microcapsule diameter is between 5 and about 200 μm (col. 3, lines 37-38). Albert fails to explicitly disclose the exact values of the particle distribution by volume, as claimed. However, Albert discloses that one skilled in the art will select an encapsulation procedure and wall material based on the desired capsule properties. These properties include the distribution of capsule radii, in addition to other properties (col. 20, lines10-16). Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to select a particular encapsulation procedure to ensure that the distribution of the capsules falls within the claimed range.

12. It is the examiner's position that particle diameter distribution by volume is a result effective variable because changing it will clearly affect the type of product obtained. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In view of this, it would have been obvious to one of ordinary skill in the art to modify the particle diameter distribution by volume to values within the scope of the present claims so as to produce desired end results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Raza whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700